

# DUANE MAINE CORPORATION SITE PERTH AMBOY, NEW JERSEY

#### I. BACKGROUND AND KEY ISSUES:

#### A. Site History

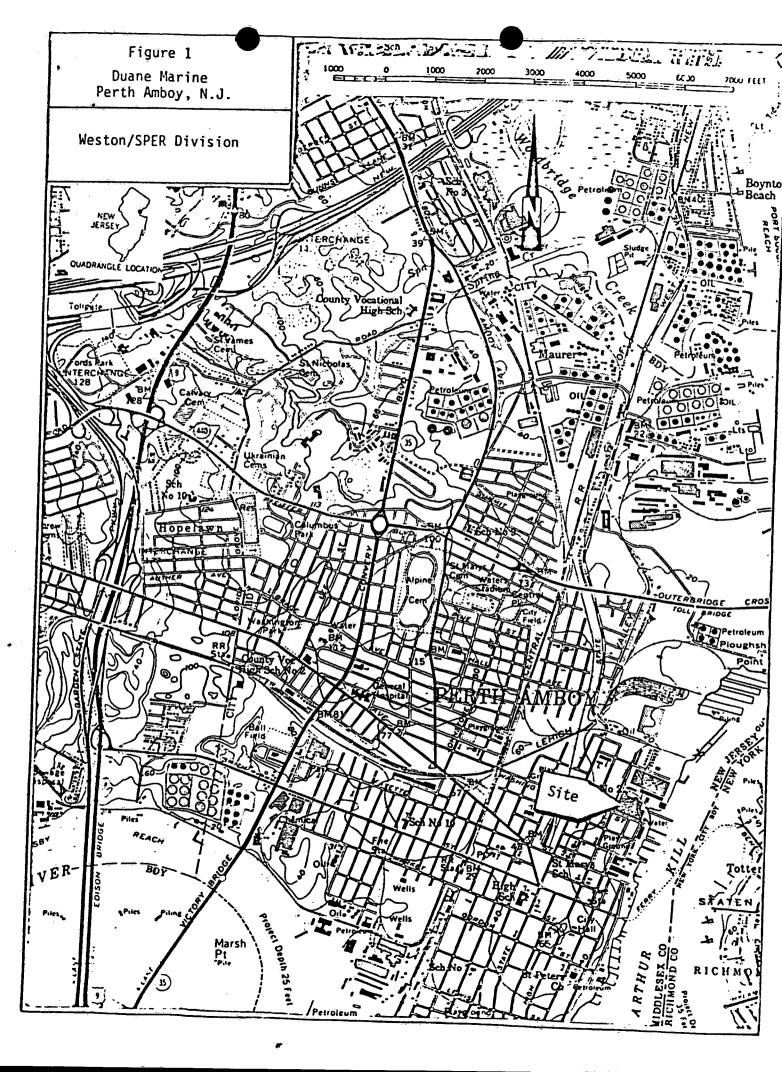
The Duane Marine Corporation site is located at 26 Washington Street in Perth Amboy, Middlesex County, New Jersey (Figure 1). The site directly borders the Arthur Kill, a navigable waterway of the United States. Approximately 3,700 metal 55-gallon drums, two dozen metal tanks, six tankers, three box trailers, and six roll-off dumpsters have been abandoned on the five-acre site (Figure 2).

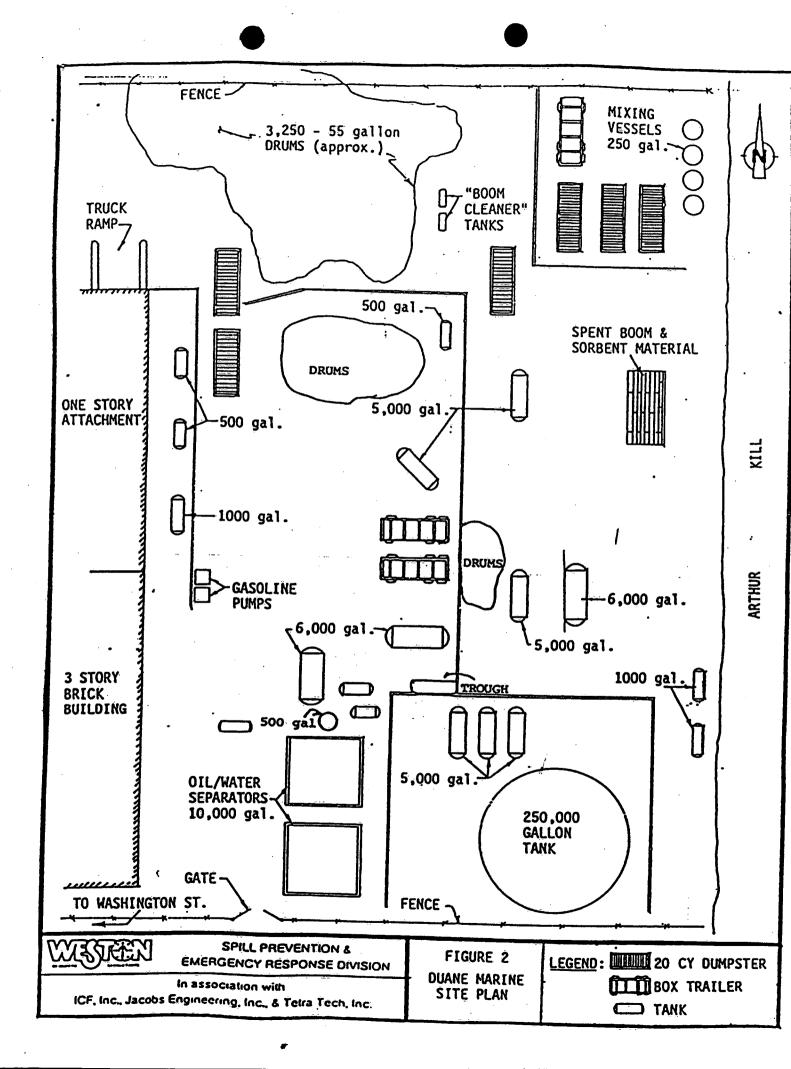
In addition, two trucks, construction debris, and piles of spent boom and sorbent material are scattered throughout the site.

Duane Marine Corporation was an oil spill cleanup contractor that opened this site for storage, treatment, blending, and reprocessing of waste oils. The NJDEP issued a temporary operating authorization of this facility on May 9, 1978 for acceptance of all of the following waste types: tank bottoms, waste oils, oil sludge, solvents, acids, alkali solutions, and flammable liquids.

The facility was not authorized to accept PCB waste which has been found at the site. On July 7, 1980 a major fire at General Cable in the Perth Amboy Industrial Center (on Washington Street) spread to the Duane Marine facility resulting in the destruction of several buildings, boats, and vehicles. Approximately 2,000 55-gallon drums of waste chemicals were consumed during the fire. Subsequent to the fire, Duane Marine Corporation expressed no interest in continuing operations and abandoned the site.

The majority of the approximately 3,700 remaining 55-gallon drums are located in the north to northwest area of the site (Figure 2). These drums are haphazardly stacked in several piles on the asphalt pavement, up to three tiers high and ten deep. Some of the drums in this area are empty, having been consumed by the July 1980 fire. The others in this area appear to contain mostly solid materials and have rusted/corroded such that labeling information is legible on only a few. Some of these drums are bulging and some do not have lids.





A much smaller drum storage area (approximately 100 drums) is located in the southeastern portion of the site. They are intact, but appear to have been tampered with between August-September 1984. There are no containment dikes around this drum storage area.

A 250,000 gallon liquid storage tank is located in the southeastern portion of the site. This steel tank is approximately thirty feet high and sits on a concrete foundation. An NJDEP sampling program conducted on June 12, 1981, showed that this tank had a PCB concentration of 176 ppm. The soil surrounding this tank is stained with an oily material from previous leakage. The tank wall is punctured on the northern side, accounting for at least part of the soil contamination. This puncture may have resulted from bullet holes. In 1982, NJDEP measured the volume of the contents of the tank to be approximately 6 feet from the top of the tank. On July 13, 1984 NJDEP measured the contents of the tanks to be approximately 27 feet from the top of the tank. The reason for this disparity is uncertain at this time.

Adjacent to the liquid storage tank are an additional three 5,000 gallon waste oil treatment tanks connected in series. All four tanks are enclosed by a dike that is constructed of reinforced concrete walls. The walls are 6 inches thick, 12 feet high and 80 feet long.

The six roll-off dumpsters (i.e., 30 cubic yards each) contain solid and/or sludge like materials. The three uncovered roll-off containers were covered with plastic tarps during the Immediate Removal Action conducted in July 1984. Also, one roll-off, where the rear door had opened and some of the contents had spilled out, was resealed at this time.

The two oil/water separator tanks (i.e., 10,000 gallons each) are located adjacent to the gate entrance. They were covered with tarps, although there is evidence of oil leakage/spillage on the asphalt pavement.

Six tankers are also present on site. Three tanks are of 5,000 gallon capacity and the other three are of 6,000 gallon capacity. At least two of these tankers have leaked in the past with no means of containment present.

There are three box trailers on site, one of which has been badly damaged by a fire that was suspected to be arson.

There are fifteen small tanks located throughout the site, the largest being of 1,000 gallon capacity. Several of these tanks are rusted/corroded and a few contain what

appear to be bullet holes.

The site is located in a heavily populated, densely industrialized area. A July 1984 Immediate Removal Action by EPA under CERCLA addressed the vandalism problem by repairing the fence and boarding up first and second floor windows (blocking access to vandals entering through the dangerously deteriorated building). This was an interim measure until NJDEP could act to remove hazardous substances from this site. Repeated vandalism continues however, increasing the threat to human health via direct contact with the hazardous materials despite the repaired security measures.

PCB contaminated oil seeped from the Duane Marine shoreline in small quantities directly into the Arthur Kill on July 12, 1984. A boom is still in place. During the July 1984 Immediate Removal Action, a trenching operation determined that there is oil floating on the water table. The largest concentrations of oil were observed between the seep and the northeast corner of the diked area surrounding the 250,000 gallon tank. The source of the oil was believed to be from buried crushed containers coated with heavy oil found during the excavation.

The site is within 0.2 miles of a residence. Approximately 5,000 people live within 1 mile of the site, including children. Perth Amboy has a population of 39,000. Directly across from the site on Washington Street is a large propane tank enclosed by a chain-link fence. The Perth Amboy Dry Dock Company is adjacent to the site on Front Street.

# B. Quantity and Types of Substances Present

There is an unknown quantity of hazardous materials on site. A sampling program of various tanks conducted by the NJDEP in June and August 1981 revealed the presence of the following hazardous substances:

### Substance

Bromoform
Dichlorobromomethane
Ethylbenzene
Tetrachloroethylene
Trichloroethylene
Total-Xylene
PCB/1254
PCB/1221

#### Statutory Source For Designation Under CERCLA

CWA,	Section	307(a)
CWA,	Section	307(a)
CWA,	Section	311(b)(4)
CWA,	Section	
CWA,	Section	311(b)(4)

#### Statutory Source For Designation Under CERCLA

#### Substance

PCB/1216
Toluene
Chlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
Trichloroethane

CWA, Section 311(b)(4) CWA, Section 311(b)(4) CWA, Section 311(b)(4) CWA, Section 307(a) CWA, Section 307(a) CWA, Section 307(a)

The NJDEP also obtained samples from the six roll-off dumpsters in September 1981. The following hazardous substances were identified:

#### Substance

Benzene
Toluene
Ethylbenzene
Total-Xylene
Dimethyl phthalate
Butylbenzyl phthalate
Methylene chloride
1,1,1-Trichloroethane
Tetrachloroethylene
Phenol
Arsenic
Chromium
Lead
Silver
Selenium

#### Statutory Source For Designation Under CERCLA

CWA, Section 311(b)(4)
CWA, Section 311(b)(4)
CWA, Section 311(b)(4)
CWA, Section 311(b)(4)
CWA, Section 307(a)
CWA, Section 301(b)(4)
RCRA, Section 3001

Very few of the drums have manufacturer or product labels. Product labels noted include waste oils, epoxy/adhesives, sodium sulfhydrate, and caustic sodium hydroxide. Manufacturers labels include Dow Chemicals, Chevron, Anchor Chemical Company, and G. Whitfield Richards.

C. This site is not on the National Priorities List.

### II. THREAT:

# A. Threat of Exposure to Public or the Environment

The threat of exposure to the public or the environment is multifold. Despite the site security measures installed in July 1984, evidence of vandalism continues to be observed at the site. EPA has observed signs that drums containing hazardous materials have been tampered with since EPA completed the site security measures. Minor

repairs to the security measures have been performed (replacing window boards) since the removal action was completed. This continued site access by individuals permits them to come in direct contact with hazardous substances as indicated above.

The potential for fire and subsequent release of toxic fumes is also of concern. A fire involving an abandoned office trailer on-site in September 1983 was considered to be of suspicious nature. Remnants of fireworks were found scattered on-site on July 13, 1984. The potential for arson still exists. As secondary containment measures are virtually non-existent, any run-off from a spill/fire will flow into the Arthur Kill, a navigable waterway of the United States. Although this waterway is not of high quality, local residents do use it for recreational purposes in this area, including boating and fishing.

### B. Evidence of Extent of Release

The present evidence of release includes the obvious oil staining and contaminated soil surrounding the 250,000 gallon oil storage tank. The tank wall is punctured (possibly from bullets) on the northern side accounting for some leakage. In addition, tanker leakage has been noted from discoloration/staining of soil on-site. The NJDEP reported that rainwater has caused displacement of material in the drum storage area with leachate flowing from this area to the Arthur Kill.

Additionally, on July 12, 1984, an oil spill was reported to be entering the Arthur Kill from several seeps along the edge of the site. This oil was determined to contain up to 14 ppm PCB's by USCG sampling. During the July 1984 Immediate Removal Action a trenching operation was conducted and oil was observed floating on the water table. The largest concentrations were observed between the seep and the northeast corner of the dike surrounding the 250,000 gallon tank. The source of the oil was believed to be from buried crushed containers coated with heavy oil found during the excavation process.

### C. Previous Actions To Abate Threat

The NJDEP collected samples for volatile organics analysis from eleven tanks/tankers on June 12, 1981 and also obtained samples for PCB analysis from thirteen tanks/tankers on August 11, 1981. The six roll-off dumpsters were sampled by NJDEP on September 2, 1981 for priority pollutant analysis. Two additional tanks were sampled for PCB analysis by NJDEP on November 19, 1981. Hazardous substances, including PCB's, were found as previously

indicated on pages 4 and 5.

In August 1981, New Jersey Spill Fund monies were utilized to secure the site. Repeated vandalism since then and continued deterioration of waste containers resulted in a threat to human health from direct contact. There is also the potential release of toxic fumes and contaminated run-off from a fire.

In July 1984, NJDEP requested that EPA repair the site security measures and stabilize the site as they were unable to act at the time. This action was completed on September 12, 1984 at a cost of approximately \$30,000.00

### D. Current Action to Abate Threat

The NJDEP is issuing a request for proposal to cover the remedial actions to be taken at the site. A contract is not expected to be awarded for 6 to 9 months from now. They have concurred that EPA should remove the surface contamination that poses an imminent threat to the public at this time.

### III. PROPOSED PROJECT

The Objectives of this Removal Action are as Follows:

- 1) Remove the contents of the 6 roll-off containers.
- 2) Empty all open vessels (two 10,000 gallon oil/ water separator tanks, one 500 gallon tank, one trough containing approximately 100 gallons of liquid) and one 5,000 gallon tank in the diked area.
- 3) Remove all drums (empty and full). The removal of the empty drums will create enough space to allow staging and sampling of the full drums.
- 4) Remove the liquid contents of the leaking closed tanks on-site. The 250,000 gallon tank's contents and the sludges will not be removed. All valves on the tanks in the diked area will be locked to remove the threat of direct contact. The potential for arson involving these tanks is minimal.

## D. Objectives of the Community Relations Plan

The plan is designed to:

 Provide accurate understandable information to local citizens, elected officials, and the media.

- Integrate the local government, State and Federal response.
- 3) Assist public acceptance of the chosen response actions.
- 4) Enlist the assistance of local officials, as needed.

The officials and groups for whom the plan is aimed are: local citizens, citizen groups, school principals, local businesses, elected officials, and local, State, and Federal agencies working in association with Region II

The information listed below will be retained by the OSC and by EPA's Office of Public Affairs, New York City, with the cognizance of the Office of the Regional Administrator.

# E. Community Relations Activities

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Date(s)	Activities	<u>Objective</u>	Staff	Work Hours
Upon author- ization of funding	1. Meeting with State and local officials	To discuss community relations needs.	OSC OEP Rep TAT*	24 24 24
Upon author- ization of funding and as needed	2. Press release	To brief local community and press. Provide community with in- formation on progress of the re- moval action.	OSC OEP Rep	4

\*TAT stands for the U.S. EPA authorized contractor, Technical Assistance Team, Roy F. Weston, Inc.

Date(s)	<u>Activities</u>	Objective	Staff	Work Hours
	3. Fact sheet	To provide information for affected interested public on activity at key decision points.	OSC OEP Rep /	4
	4. Briefings	To inform State and local offi- cials about on-going developments at the site.	OSC OEP Rep	4 4
	5. Public meetings	To discuss the need for response and review key decision points, explain the cleanup method and respond to concerned.	OSC OEP Rep	4
During removal	6. Site tours	Local elected officials, local and State gov- ernment officials.	OSC	8
F. List o	f Kev Officials as	d Control		

# F. List of Key Officials and Contacts

Federal Agencies	Phone
EPA Region II Response and Prevention Branch	
Bruce Sprägue, OSC	(201) 321-6656

Federal Agencies (Continued)	Phone
EPA Office of External Programs Jim Marshall Rich Cahill Herman Phillips Lillian Johnson	(212) 264-4913 (212) 264-8504 (212) 264-1044 (212) 264-2515
Federal Officials	
Senator Bill Bradley Senator Frank Lautenberg Representative Bernard Dwyer	(202) 224-3224 (202) 224-9714 (201) 826-4610
New Jersey State Agencies	
NJDEP Central Emergency Response Center State Hazardous Waste Task Force	(609) 292-5560
Steve Madonna	(609) 984-4470
NJ Department of Health Occupa- tional & Environmental Health Services	
Dr. Ken Rosenman	(609) 984-1863
NJ State Police Edison Station	(201) 548-2313
New Jersey State Officials	
Senator Larry Weiss Assemblyman Allen Karcher Assemblyman George O'Tlowski	(201) 826-1900 (201) 257-1515 (201) 826-7996
Middlesex County Agencies	
Health Department	(201) 828-8100
Middlesex General Hospital	(201) 937-8583
Middlesex County Officials	· 1
Stephen J. Capestro, Freeholder Director	(201) 321-6800 Ext. 311

Perth Amboy Agencies	Phone
Police Department	(201) 442-4400
Fire Department	(201) 826-1111
Perth Amboy General Hospital	(201) 442-3700
Health Department	(201) 826-0290
Mayor's Office George O'Tlowski  Local Papers	(201) 826-7121
Star Ledger	(201) 877-4141
News Tribune	(201) 4/2-0400